

GenCore version 4.5
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OM protein - protein search, using sw model

Run on: March 1, 2001, 15:47:28 ; Search time 37.5 Seconds
(without alignments)
54.710 Million cell updates/sec

Title: US-09-331-631a-22_COPY_25_84

Perfect score: 350
Sequence: 1 EDNNHHHGHSKSGQCVRR.....EKRSERSRHEADRSRGSSS 60

Scoring table: BLOSUM62
Gapop 10.0 , Gapext 0.5

Searched: 268485 seqs, 34193795 residues

Total number of hits satisfying chosen parameters: 268485

Minimum DB seq length: 0
Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%
Maximum Match 100%

Listing first 45 summaries

Database :

A_Geneseq_36:*

- 1: /SIDSL/gcgdata/geneseq/geneseq/AA1980.DAT:*
- 2: /SIDSL/gcgdata/geneseq/geneseq/AA1981.DAT:*
- 3: /SIDSL/gcgdata/geneseq/geneseq/AA1982.DAT:*
- 4: /SIDSL/gcgdata/geneseq/geneseq/AA1983.DAT:*
- 5: /SIDSL/gcgdata/geneseq/geneseq/AA1984.DAT:*
- 6: /SIDSL/gcgdata/geneseq/geneseq/AA1985.DAT:*
- 7: /SIDSL/gcgdata/geneseq/geneseq/AA1986.DAT:*
- 8: /SIDSL/gcgdata/geneseq/geneseq/AA1987.DAT:*
- 9: /SIDSL/gcgdata/geneseq/geneseq/AA1988.DAT:*
- 10: /SIDSL/gcgdata/geneseq/geneseq/AA1989.DAT:*
- 11: /SIDSL/gcgdata/geneseq/geneseq/AA1990.DAT:*
- 12: /SIDSL/gcgdata/geneseq/geneseq/AA1991.DAT:*
- 13: /SIDSL/gcgdata/geneseq/geneseq/AA1992.DAT:*
- 14: /SIDSL/gcgdata/geneseq/geneseq/AA1993.DAT:*
- 15: /SIDSL/gcgdata/geneseq/geneseq/AA1994.DAT:*
- 16: /SIDSL/gcgdata/geneseq/geneseq/AA1995.DAT:*
- 17: /SIDSL/gcgdata/geneseq/geneseq/AA1996.DAT:*
- 18: /SIDSL/gcgdata/geneseq/geneseq/AA1997.DAT:*
- 19: /SIDSL/gcgdata/geneseq/geneseq/AA1998.DAT:*
- 20: /SIDSL/gcgdata/geneseq/geneseq/AA1999.DAT:*
- 21: /SIDSL/gcgdata/geneseq/geneseq/AA2000.DAT:*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	Query Match	Length	ID	Description
1	350	100.0	593	19	W62835
2	129.5	37.0	637	19	W62837
3	80.5	23.0	625	19	W62830
4	79.5	22.7	666	19	W62829
5	77.5	22.1	666	19	W62828
6	70	20.0	2337	19	W37878
7	68.5	19.6	185	20	W60129
8	68.5	19.6	2251	16	R71009
9	68.5	19.6	2270	16	R71010
10	67.5	19.3	132	20	Y07004
11	67.5	19.3	432	20	W93934
12	67	19.1	525	19	W62831

13	67	19.1	566	13	R20181
14	67	19.1	590	14	W62832
15	67	19.1	2237	19	R33550
16	66	18.9	605	20	Y31741
17	66	18.9	1931	13	R27649
18	66	18.9	2237	16	R71006
19	66	18.9	2237	19	W63142
20	66	18.9	2338	21	Y78900
21	66	18.9	2339	14	R33549
22	66	18.9	2339	16	R71005
23	66	18.9	2339	19	W63141
24	66	18.9	2343	20	Y31809
25	65.5	18.7	641	20	Y32158
26	65.5	18.7	1144	20	Y32156
27	65.5	18.7	1215	20	Y32155
28	65.5	18.7	1220	20	Y32155
29	65.5	18.7	2270	16	R69604
30	64.5	18.4	96	20	W99838
31	64.5	18.4	797	20	W92641
32	63.5	18.1	1182	20	Y34496
33	63.5	18.1	2510	16	R71007
34	63	18.0	605	21	Y57950
35	62.5	17.9	96	20	W99836
36	62.5	17.9	299	21	Y66887
37	62.5	17.9	558	20	Y29184
38	62.5	17.9	3077	10	P93283
39	62.5	17.9	3211	9	P81769
40	62	17.7	361	20	Y22306
41	62	17.7	444	20	W90340
42	62	17.7	524	20	W90339
43	62	17.7	1148	20	Y07087
44	61.5	17.6	96	20	W99831
45	61.5	17.6	96	20	W99835

ALIGNMENTS

RESULT 1	
W62835	
ID	W62835 standard; Protein; 593 AA.
XX	
AC	W62835;
XX	
DT	27-OCT-1998 (first entry)
XX	
DE	Zea mays antimicrobial protein.
XX	
KW	antimicrobial protein; infestation; control.
XX	
OS	Zea mays.
XX	
PN	W09827805-A1.
XX	
PD	02-JUL-1998.
XX	
PE	22-DEC-1997; 97WO-AU00874.
XX	
PR	20-DEC-1996; 96AU-0004275.
XX	
PA	(RETR-) COOP RES CENT TROPICAL PLANT PATHOLOGY.
XX	
PI	Bower NI, Goulter KC, Green JL, Manners JM, Marcus JP;
XX	
DR	WPI; 1998-377279/32.
XX	
PT	Novel anti-microbial protein from e.g. Macadamia integrifolia -
XX	useful for controlling microbial infestations of plants or mammals
PS	Claim 1; Page 58-60; 96pp; English.
CC	The sequence is that of an antimicrobial protein which can
CC	be used to control microbial infestations in plants and mammalian

Sequence encoded b
Gossypium hirsutum
Sequence of the al
Human podocalyxin-
Human calcium chan
Human neuronal cal
Human calcium chan
Calcium channel al
Sequence of the al
Human neuronal cal
Human calcium chan
N-type calcium cha
Human SH3D1A prote
Human SH3D1A prote
Human SH3D1A prote
Human SH3D1A prote
Calcium channel al
HIV C765 protein s
Murine PGC-1 prote
Human SCA6 protein
Human neuronal cal
Human transmembran
HIV H7IC protein s
Membrane-bound pro
Amino acid sequenc
Sequence of clone
Biorhythm marker p
G. max truncated S
G. max SBPI protei
Renal cancer assoc
HIV E21.24P protei
HIV L685 protein s

XX 22-DEC-1997; 97WO-AU00874.
 XX 20-DEC-1996; 96AU-0004275.
 XX (RETR-) COOP RES CENT TROPICAL PLANT PATHOLOGY.
 PA Bower NI, Goulter KC, Green JL, Manners JM, Marcus JP;
 XX WPI; 1998-377279/32.
 DR N-PSDB; V42311.
 XX Novel anti-microbial protein from e.g. Macadamia integrifolia -
 PT useful for controlling microbial infestations of plants or mammals
 XX
 PS Claim 1; Page 39-41; 96pp; English.
 CC The sequence is that of an antimicrobial protein which can
 CC be used to control microbial infestations in plants and mammalian
 CC animals.
 CC
 SQ Sequence 666 AA;

Query Match 22.7%; Score 79.5; DB 19; Length 666;
 Best Local Similarity 32.8%; Pred. No. 0.18;
 Matches 20; Conservative 10; Mismatches 26; Indels 5; Gaps 3;

OY 1 EDDNNHHNGHSGQCVRCR---EDRPWQHQRCLQEC-REEREKRGERSRHEADRRSG 56
 Db 114 eeynrtqrdpqgqeqcqrctetprhmq-tcqrcterryekekrtkqkryeeqged 172
 QY 57 E 57
 Db 173 e 173

RESULT 5
 ID W62828 standard; Protein; 666 AA.
 AC W62828;
 DT 27-OCT-1998 (first entry)
 DE Macadamia integrifolia antimicrobial protein.
 XX antimicrobial protein; infestation; control.
 KW Macadamia integrifolia.
 OS
 XX
 FH Key location/Qualifiers
 FT Peptide 1..28
 FT Protein /note="signal peptide"
 FT Protein /note="mature protein"
 PN W09827805-A1.
 PD 02-JUL-1998.
 XX 22-DEC-1997; 97WO-AU00874.
 PF 20-DEC-1996; 96AU-0004275.
 PR (RETR-) COOP RES CENT TROPICAL PLANT PATHOLOGY.
 PA Bower NI, Goulter KC, Green JL, Manners JM, Marcus JP;
 XX WPI; 1998-377279/32.
 DR N-PSDB; V42310.
 XX Novel anti-microbial protein from e.g. Macadamia integrifolia -

PT useful for controlling microbial infestations of plants or mammals
 XX
 PS Claim 1; Page 34-36; 96pp; English.
 XX
 CC The sequence is that of an antimicrobial protein which can
 CC be used to control microbial infestations in plants and mammalian
 CC animals.
 CC
 SQ Sequence 666 AA;

Query Match 22.1%; Score 77.5; DB 19; Length 666;
 Best Local Similarity 31.1%; Pred. No. 0.31;
 Matches 19; Conservative 12; Mismatches 25; Indels 5; Gaps 3;

OY 1 EDDNNHHNGHSGQCVRCR---PWHQRPRCLQEC-REEREKRGERSRHEADRRSG 56
 Db 114 eeynrtqrdpqgqeqcqrctetprhmq-tcqrcterryekekrtkqkryeeqged 172
 QY 57 E 57
 Db 173 e 173

RESULT 6
 ID W37878 standard; Protein; 2337 AA.
 AC W37878;
 DT 28-AUG-1998 (first entry)
 DE Human calcium channel $\alpha 1B$ subunit.
 XX
 DE
 KW Calcium channel; human; central nervous system disorder;
 KW Lambert-Eaton syndrome; diagnosis; therapy.
 XX
 OS Homo sapiens.
 OS
 PN W09811131-A2.
 PD 19-MAR-1998.
 PF 11-SEP-1997; 97WO-US16146.
 PR 16-SEP-1996; 96US-0713118.
 XX (AMHP) AMERICAN HOME PROD CORP.
 PA Chen ARS, Franco R, Shuey DJ;
 XX WPI; 1998-207325/18.
 DR N-PSDB; V29059.
 DR DNA encoding human neuronal calcium channel subunit(s) - useful for
 PT diagnosis of and treatment of central nervous system disorders, e.g.
 PT Lambert-Eaton syndrome
 PS Disclosure; Fig 1; 89pp; English.
 XX
 CC This polypeptide comprises the $\alpha 1B$ subunit of the human neuronal
 CC calcium channel. cDNA clones (see V29059-61) encoding the $\alpha 1B$
 CC subunit, the $\alpha 2B$ subunit (see W37879) and a $\beta 3$ subunit (see W37880)
 CC have been isolated. These have been inserted into expression
 CC vectors and are stably expressed in transformed cell lines. The
 CC and omega-conotoxin GVIA toxin sensitive potassium-stimulated
 CC calcium upstroke, indicating that the proteins expressed by the
 CC clones are capable of forming a functioning calcium channel.
 CC Nucleic acids encoding the 3 subunits, as well as vectors, host
 CC cells and methods of isolating nucleic acids encoding related
 CC calcium channels are disclosed. Fusion proteins incorporating the
 CC subunit proteins, antibodies, and assays for identifying agents

Db 2066 qtpnrgtgs 2075

RESULT 9

ID R71010 standard; Protein: 2270 AA.

XX R71010;

DT 01-DEC-1995 (first entry)

DE Human neuronal calcium channel subunit alpha 1E-3.

KW Calcium channel subunit; antagonist; agonist; diagnosis;

KM Lambert Eaton Syndrome.

XX Homo sapiens.

PN W09504822-A.

PD 16-FEB-1995.

PF 11-AUG-1994; 94WO-US09230.

PR 11-AUG-1993; 93US-0105536.

PR 05-NOV-1993; 93US-0149097.

XX (SALK) SALK INST BIOTECHNOLOGY IND ASSOC.

PI Ellis SB, Gillespie A, Harpold MM, McCue AF, Williams ME;

DR WPI; 1995-090900/12.

DR N-PSDB; Q84663.

PT DNA encoding human calcium channel sub-unit(s) - used for

PT developing prods. for studying calcium channels, e.g. for

PT obtaining agonists and antagonists

XX Claim 34; Page 212-222; 285pp; English.

CC DNA encoding alpha 1E human calcium channel subunits have

CC been isolated from an oligo dt-primed human hippocampus

CC library. The resulting clones, which are splice variants,

CC were designated alpha 1E-1 and alpha 1E-3. These splice variants

CC differ by virtue of a 57 bp insert in 1E-3. Alpha 1E-1 has

CC a calculated mol. wt. of 254,836 and alpha 1E-3 has a calculated

CC mol. wt. of 257,348. Alpha 1E-3 has a 19 AA insert relative to

CC alpha 1E-1 in the region that appears to be the cytoplasmic loop

CC between transmembrane domains II56 and III51.

CC

CC

CC

CC

SQ Sequence 2270 AA;

Query Match 19.6%; Score 68.5; DB 16; Length 2270;

Best Local Similarity 31.4%; Pred. No. 12;

Matches 22; Conservative 6; Mismatches 29; Indels 13; Gaps 2;

QY 3 DNNHHGHSQGVRCRCPWQNRRCLEQCRERER-----EKQERS-----RH 49

Db 2025 dsqtksdltphsgdrrtrskerkhllspdvscnseergtqadwesperrtgspsgrs 2084

QY 50 EADDRSGEGS 59

Db 2085 qtpnrgtgs 2094

RESULT 10

ID Y07004 standard; Protein: 132 AA.

XX Y07004;

XX Y07004;

DT 02-JUL-1999 (first entry)

XX Breast cancer associated antigen precursor sequence.

XX Cancer associated antigen; diagnosis; research; treatment; human;

KW breast cancer; colon cancer; gastric cancer; renal cancer; lung cancer;

KM prostate cancer.

XX Homo sapiens.

PN W09904265-A2.

PD 28-JAN-1999.

PF 15-JUL-1998; 98WO-US14679.

PR 22-JUN-1998; 98US-0102322.

PR 17-JUL-1997; 97US-0896164.

PR 10-OCT-1997; 97US-0061599.

PR 10-OCT-1997; 97US-0061765.

PR 10-OCT-1997; 97US-0948705.

PR 11-OCT-1997; 97GB-0021697.

XX (LUDW-) LUDWIG INST CANCER RES.

PI Chen Y, Gout I, Gure A, O'Hare M, Obata Y, Old LJ;

PI Pfrendschuh M, Sahin U, Scanlan MJ, Stockert E;

PI Tureci O;

DR WPI; 1999-132448/11.

XX New isolated cancer associated nucleic acids and polypeptides -

PT isolated using sera from cancer patients, used to develop products

PT for the diagnosis, monitoring or treatment of cancers

XX Disclosure; Page 389-390; 787pp; English.

XX The invention relates to a method for diagnosing a disorder characterised

CC by expression of a human cancer associated antigen precursor coded for by

CC a nucleic acid molecule (NAM). The method comprises: (a) contacting a

CC biological sample isolated from a subject with an agent that specifically

CC binds to the NAM, an expression product or a fragment of an expression

CC product complexed with an HLA molecule; and (b) determining the

CC interaction between the agent and the NAM or the expression product as a

CC determination of the disorder. The products and methods can be used in

CC the diagnosis, monitoring, research, or treatment of conditions

CC characterised by the expression of various cancer associated antigens.

CC The invention provides nucleic acid sequences and encoded polypeptides

CC which are cancer associated antigen precursors expressed in human breast

CC cancer, renal cancer, colon cancer, gastric cancer, prostate cancer and

SQ Sequence 132 AA;

Query Match 19.3%; Score 67.5; DB 20; Length 132;

Best Local Similarity 23.1%; Pred. No. 0.82;

Matches 18; Conservative 12; Mismatches 27; Indels 21; Gaps 2;

QY 4 NHHNHGCH--KSGQCYVRCEDRP-----WHQPRRCLEQCRERER 42

Db 39 shstskhkkkthcsekededymptkntngdiylremfgfgyeeescwckqksektrdr 98

QY 43 KQERSRHEADRSGEGS 60

Db 99 tqntrsrtrerdghysn 116

RESULT 11

ID W93954 standard; Protein: 432 AA.

XX W93954;

